B
esides Angelica sinensis, discussed last month, other species of Angel-
ica have been studied for their med-
icinal potential, and, gradually, these species have been introduced into topical formulations.

Antitumor Activity
In a 2003 study, mice with highly metastas-
tic drug-resistant tumors were used to test the effects of various herbal compounds on tumor growth and metastasis. Although the focus of the study was still the same compound, investigators found that two chalcone deriva-
tives from Angelica keiskei roots inhibited tumor growth and metastasis. The chalcone derivatives worked by suppressing tumor-induced neovascularization and/or reducing the in-

Chalcones extracted from A. keiskei root, also known as ashtabula, which is consumed as a vegetable in Japan, also exhibited antitu-
morogenic activity in the two-phase mouse skin cancer model, in which carcinogene-
sis is induced by 7,12-dimethylbenz[a]an-
thracene (DMBA) and promoted by 12-
tetradecanoylphorbol-13-acetate (TPA).

In another, Angelica species, A. archangelica, exhibits antitumorogenic properties. Investigators evaluated it in vitro and in vivo effects of A. archangel-
ica leaf extract on the growth of Crl mouse breast cancer cells. In vitro, the extract was found to be mildly antiproliferative. In the in vivo segment of the study, 11 of 20 mice were injected with A. archangelica leaf extract, and 9 of them developed no or small tumors, whereas control mice de-
veloped tumors at a significantly larger rate. The antitumor properties of A. archangelica extract could not be attributed to the antiproliferative characteristics of the furanocoumarins in the extract (In Vivo 2005;19:194-1).

Significant antiproliferative activity has also been identified in the tincture of A. archangelica, using the human pancreas cancer cell line Panc-1 as a model. In-
vestigators ascribed most of the antipro-
liferative activity to imperatorin and xan-
thotinin, the two furanocoumarins most prevalent in the A. archangelica tincture (Z. Naturforsch. [C] 2004;59:523-7).

Dermatologic Potential
In addition to antitumorogenic activity, several Angelica species have exhibited properties pertinent to clinical derma-
tology. Hwaotang, a traditional Korean formulation that combines seven herbs, including A. gigas, exerts anti-inflamma-

In a study of the anti-inflammatory ac-
tive of a new formulation containing

Angelica: Part II

Cosmeceutical Critique

Angelica

Experience May Be Dispelling the ‘Old Wives’ Tales of Botox

BY BETSY BATES

Santa Monica, Calif. — In the early days of cosmetic bot-
utulinum toxin type A. Therapy, ru-
mors greatly outnumbered scien-
tific fact about its safety, storage, and stored effect on forehead brows and deep crow’s feet.

The faculty at a recent cos-
metic dermatology seminar sponsored by Skin Disease Edu-
cation Foundation helped to put some of these myths to rest.

▲ Botox is deadly. Among 28 deaths reported to the Food and Drug Administration from De-
407-15). Indeed, of 16 deaths re-
cently highlighted by citizen groups, all involved serious dis-
teriors treated with huge volumes of Botox, said Dr. Allan Wirte-
ter, a dermatologist in private practice in Sherman Oaks, Calif. Among the potentially deadly uses of Botox is treatment of se-
tive cerebral dystonia, which can lead to spread of the toxin to the pharynx, producing dysphagia or aspiration pneumonia.

▲ Book preweding Botox sessions on Friday afternoons. Dis-
appointed brides and furious mothers will blame you for the wedding pictures if you schedule cosmetic procedures too close to the ceremony, said Dr. David Goldman, a dermatologist in private practice in La Jolla, Calif. Botox’s full effect takes 5-6 days, and unexpected bruising may need time to heal.

▲ Avoid freezing. The refrigera-
tor is the place for Botox, but Dr. Richard Glogau, a dermatologist in San Francisco, may have chipped away at the myth that freezing “will degrade the mole-
cule,” when Botox that was frozen by mistake worked just fine on his patients, Dr. Goldman said.

▲ Save the paralysis for the muscles. There was a day when patients were told to sit perfect-
ly upright, avoid exercise, and cancel air travel plans for hours after Botox injections. These pre-
cautions are “just old wives’ tales—such ridiculous stuff,” said Dr. Goldman.

Dr. Wirte-
ter has served as a con-
sultant for Medicis, distributor of Relaxin (botulinum toxin type A, not approved in the United States). Dr. Goldman has received grant support from, and served as a consultant and speaker for, Al-
levan Inc., maker of Botox. SDEF and this news organiza-
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